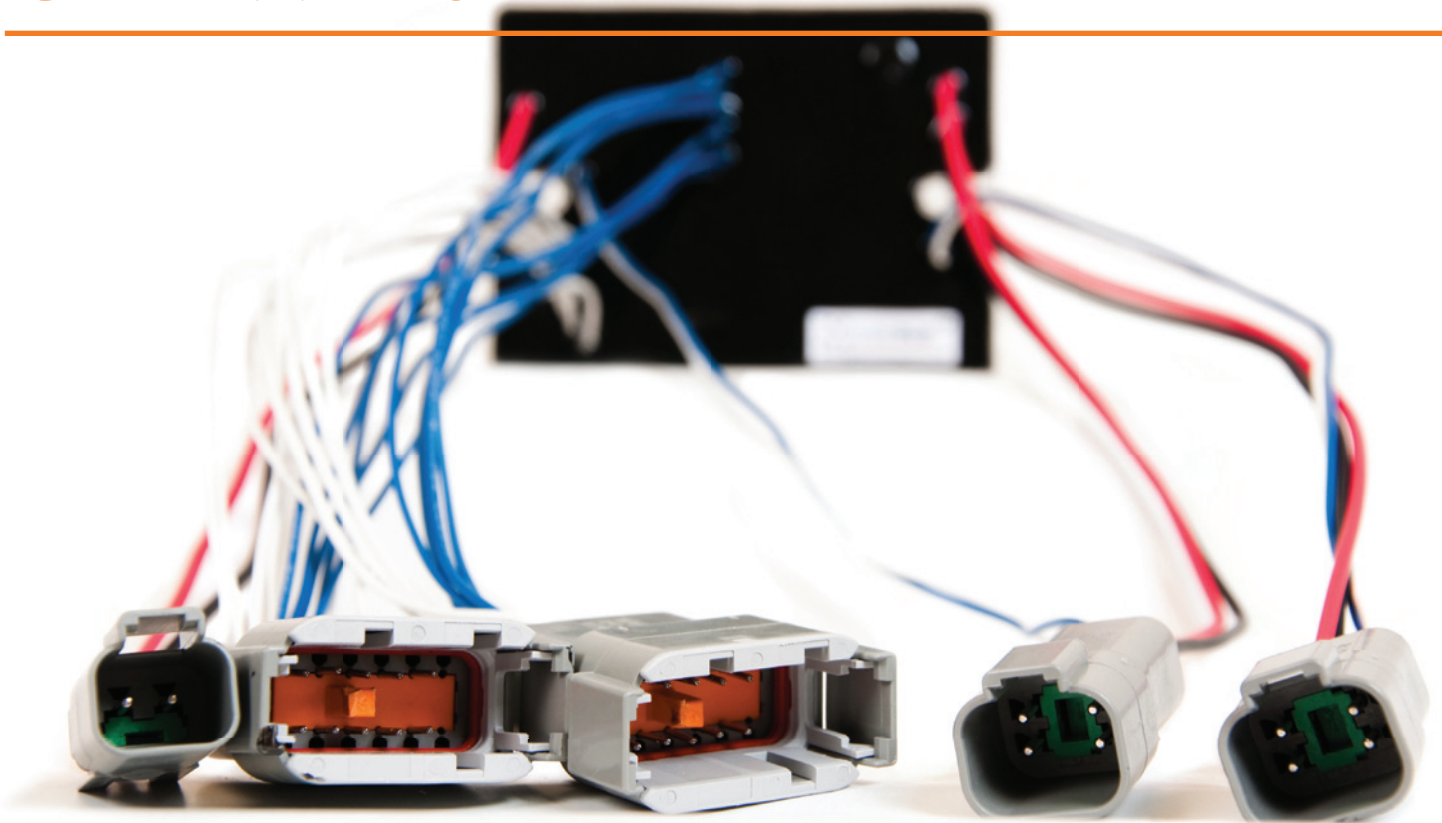


GATEWAYS

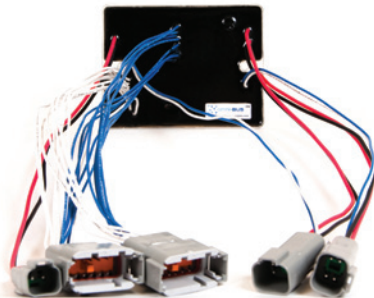


PowerGate 1000

Digital Switching Systems' gateways are designed to provide customers with simple interface solutions at a low cost. Whether you are wanting greater versatility of choice in switch types and dash looks while still enjoying all the benefits of digital power distribution or if you are wanting to bridge information to and from the NMEA 2000 environment, these gateway options are a perfect, low-cost solution.

POWERGATE 1000

The PowerGate 1000 is a great way to have versatility of choice in switch types and dash looks, yet enjoy all the benefits of digital power distribution, including dual control stations, remote trip re-setting and reduced cabling. All of this is available with one low-cost interface gateway. Every model dash change becomes a simple switch style choice, leaving all the feature enhancements and interconnectivity to new devices networked to Digital Switching Systems' omni-BUS™ software configuration tool.



POWERGATE 2000

The PowerGate 2000 is the perfect solution to facilitate communication between Digital Switching Systems' products and other NMEA 2000 devices. A fully-networked switching solution, this certified interface functions as a node on the NMEA 2000 communication bus.



Customers can now enjoy the benefits of having a Digital Switching Systems product that monitors and controls information in the NMEA 2000 environment. The NMEA 2000 interface standard allows the interconnection of other onboard equipment on vessels such as tanks, engines, lighting and navigation equipment.

The PowerGate 2000 is a multi-master and reconfigurable product which eliminates the need for a central network controller. Equipment designed to this standard has the ability to share data, including commands and status, with other compatible products over a single channel.



FEATURES AND SPECIFICATIONS

POWERGATE 1000

- 10 outputs that detect either an open, switch to ground, or battery voltage
- 10 indicator outputs
- 1 output that drives 10 indicator backlights
- 1 output for RS-485
- 1 output for CAN or NMEA 2000
- Connector is customer selectable for RS-485 and CAN-bus systems
- Product is terminated with a micro-C connector for NMEA2000 systems

ELECTRICAL

Supply Voltage	12-24V Nominal 8-32V	Switch backlight current	170mA total, 43mA per switch backlight (internally limited)
Standby Current	10-30mA per gateway	Communication BUS	RS485 and/or CAN-bus
Switch Indicator Current	170mA per indicator (internally limited)		

MECHANICAL

Connector	Customer selected	Operating Temperature	-20° C to +85° C
Mating Connector	N/A	Storage Temperature	-40° C to +85° C
Housing	PVC, 0.050" thick	Humidity	0 to 98% (no condensation)
PC Board	0.062" thick, Nema Grade FR-4, double clad with 1oz copper	Salt Spray	Per ASTM B117
PC board conformal coating/epoxy	All components are encased in electronics grade epoxy		

POWERGATE 2000

- This NMEA 2000 certified product allows for interconnection of other onboard equipment
- Implemented Parameter Groups. Parameter Group Name PGN Required Parameter Groups.
 - ISO Address Claim 60928
 - NMEA 2000 Product Information 126996
 - ISO Request 59904
- Multi-master and self-configuring - eliminates the need for a central network controller
- Application Parameter Group
 - Binary Switch Bank Status 127501
 - Switch Bank Control 127502
 - NMEA 2000 Request/Command/Acknowledgement 126208

ELECTRICAL

Supply Voltage	12-24V Nominal 8-32V	Switch backlight current	N/A
Standby Current	10-30mA per gateway	Communication BUS	RS485 and NMEA 2000
Switch Indicator Current	N/A		

MECHANICAL

Connector	Deutsch DT04-4P or equivalent, Micro-C	Operating Temperature	-20° C to +85° C
Mating Connector	Deutsch DT06-4S, Micro-C	Storage Temperature	-40° C to +85° C
Housing	PVC, 0.050" thick	Humidity	0 to 98% (no condensation)
PC Board	0.062" thick, Nema Grade FR-4, double clad with 1oz copper	Salt Spray	Per ASTM B117
PC board conformal coating/epoxy	All components are encased in electronics grade epoxy		

!WARNING! IMPROPER SELECTION, IMPROPER USE AND/OR FAILURE OF THE DIGITAL SWITCHING SYSTEMS PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE. This document and other information from Digital Switching Systems, LLC, provide product and/or system options for further investigation by users having technical expertise. It is important to analyze all aspects of the application, including consequences of any failure. Due to the variety of operating conditions and applications for these product(s), the manufacturer of the application is solely responsible for making the final selection of the product(s) and system(s) and assuring that all performance, safety and warning requirements of the application are met. The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Digital Switching Systems, LLC at any time without notice.